

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-22 (Canceled).

Claim 23 (Currently Amended): A device An optimization system for automated optimization of a service life of technical facilities and/or risk determination of technical facilities, comprising:

an optimization device that includes an analysis module configured to analyze facility data to optimize the service life of a technical facility;

a capture module for capturing configured to capture the facility data of the technical facility, the capture module including at least one measuring device having at least one sensor, connected to the optimization device via a network, with corresponding interfaces for determining one or more facility-specific quality factors, the at least one measuring device being allocated to a particular technical facility; and

an analysis module for analyzing the facility data and/or optimizing the service life of the facility, wherein the capture module comprises at least one measuring device and/or sensor, connected to the optimization device decentralized via a network, with corresponding interfaces for determining one or more facility specific quality factors, wherein the measuring device and/or sensor is allocated to a particular technical facility,

a first database with configured to store predefined risk elements, wherein identifying in a quantified manner a risk instance and/or a risk potential of the technical facility can be detected in a quantified manner by a risk element;

a second database with configured to store predefined protection elements, wherein identifying in a quantified manner a protection device and/or a protection possibility of technical facilities ~~can be detected in a quantified manner by a protection element~~;

a third database configured to store, for each technical facility, at least one risk element and/or at least one protection element ~~stored~~ allocated to the technical facility, wherein a facility-specific weighting factor ~~can be~~ determined for each risk element and protection element, and a facility-specific quality factor, determined by the capture module via the at least one measuring device, for each risk element and protection element, the which facility-specific weighting factor ~~comprises~~ identifying the relative weighting ratio of the risk elements and/or protection elements with respect to one another, ; ~~wherein by the at least one measuring device and/or sensor, a facility-specific quality factor can be determined for each risk element and protection element, wherein the facility-specific quality factor comprises identifying~~ an instantaneous facility-specific instance of a ~~technical~~ risk element or protection element based on the basis of the measured facility data; and

an evaluation module for determining configured to determine risk analysis values and/or facility optimization values based on the basis of the sum of the products of the risk elements with associated facility-specific weighting factors and facility-specific quality factors ~~combined with as well as~~ the sum of the products of the protection elements with associated facility-specific weighting factors and facility-specific quality factors, wherein the evaluation module is implemented as hardware or as a hardware/software combination.

Claim 24 (Currently Amended): The device system as claimed in claim 23, further comprising:

a memory module comprising configured to store a multiplicity plurality of facility risk types, ~~wherein the facility risk types in each case comprise having at least one risk element and/or one protection factor and each technical facility can be allocated to one facility risk type; and~~

~~a normalization module for automatically generating configured to automatically generate~~ a facility-risk-type-specific reference value,

wherein

each technical facility is allocated to one facility risk type, and
the facility data of different technical facilities are normalized based on the
basis of the reference value of the associated facility risk type by the normalization
module.

Claim 25 (Currently Amended): The device system as claimed in claim 23, further comprising:

~~an extrapolation module for automatically generating configured to automatically generate~~ the risk analysis values and/or optimization data for possible combinations and weightings of the protection elements and/or risk elements.

Claim 26 (Currently Amended): The device system as claimed in claim 23, wherein a group risk factor ~~can be is~~ allocated to each facility risk type, ~~wherein the group risk factor~~

~~can be~~ being calculated by the evaluation module and ~~comprises the~~ identifying an overall risk of all technical facilities of a facility risk type.

Claim 27 (Currently Amended): The device system as claimed in claim 23, wherein the capture module is further configured to be accessible ~~decentralized~~ via a decentralized network.

Claim 28 (Currently Amended): A method for automated risk management and/or automated optimization of a service life of technical facilities, comprising: ~~wherein capturing, via a capture module of an optimization device, facility data of a technical facility; are captured by a capture module of an optimization device and facility risks are optimized by an evaluation module of the optimization device on the basis of the facility data, the method comprising:~~

~~generating and storing, in a first database, a list with risk elements in a first database of the optimization device, wherein identifying a risk instance and/or a risk potential of technical facilities can be detected in a quantified manner by a risk element;~~

~~generating and storing, in a second database, a list with protection elements in a second database of the optimization device, wherein identifying a protection device and/or a protection possibility of technical facilities can be detected in a quantified manner by a protection element;~~

~~storing, in a third database and for each technical facility, at least one risk element and/or protection element allocated to the technical facility, wherein a facility-specific weighting factor [[is]] being determined for each associated risk element and protection~~

element, which and a facility-specific quality factor determined by the capture module via a measuring and/or capturing device, the facility-specific weighting factor comprises identifying the relative weighting ratio of the risk elements and/or protection elements with respect to one another, ; determining a facility specific quality factor by the capture module for each risk element and protection element via corresponding interfaces by a respective measuring and/or capture device, wherein the facility-specific quality factor comprises the identifying an facility-specific instance of a risk element or protection element based on the basis of the measured facility data; and

determining, [[by]] via the evaluation module, based on the basis of the sum of the products of the risk elements with associated facility-specific weighting factors and facility-specific quality factors combined with as well as the sum of the products of the protection elements with associated facility-specific weighting factors and facility-specific quality factors, at least one risk analysis value for automated risk management, and/or one facility optimization value for automated optimization of at least one protection device [[or]] and/or minimization of a risk potential of the technical facility.

Claim 29 (Currently Amended): The method as claimed in claim 28, further comprising:

generating and storing, in a memory module, at least two facility risk types in a memory module of the optimization device, wherein the facility risk types comprise in each case including at least one risk element and/or one protection element, and each technical facility can be being allocated to one facility risk type; and

generating, at a normalization module, a reference value for each facility risk type; ,
wherein

normalizing, via the normalization module, the facility data of different technical facilities ~~are normalized by a normalization module based on the basis of~~ of the reference value of the associated facility risk type.

Claim 30 (Original): The method as claimed in claim 29, wherein the facility risk types and/or the associated reference values are generated dynamically.

Claim 31 (Currently Amended): The method as claimed in claim 29, wherein the facility risk types are generated such that a technical facility ~~can always be allocated is~~ unambiguously allocated in each case to one facility risk type.

Claim 32 (Currently Amended): The method as claimed in claim 28, further comprising:

generating and storing a two-dimensional ~~matrix~~ table in accordance with a combination, ~~in which a first dimension is of the two-dimensional table identifying allocated to the a~~ protection level of a technical facility and a second dimension ~~is of the two-dimensional table identifying allocated to the a~~ risk level of a technical facility;
~~transferring populating the two-dimensional table~~, for automated risk management and/or for automated optimization of the service life of the technical facility, with the sum of the products of the protection elements with associated facility-specific weighting factors and facility-specific quality factors of the technical facility in relation to the first dimension, and

transferring populating the two-dimensional table with the sum of the products of the risk elements with associated weighting factors and quality factors of the technical facility in relation to the second dimension; and

determining that the at least one risk analysis value and/or facility optimization value on the basis of location of an entry in the two-dimensional matrix table.

Claim 33 (Currently Amended): The method as claimed in claim 32, wherein the two-dimensional matrix table is divided into predefinable sectors, ~~wherein a~~ each sector ~~corresponds corresponding~~ to at least one definable risk analysis value and/or facility optimization value.

Claim 34 (Currently Amended): The method as claimed in claim 32, wherein the two-dimensional matrix table is normalized by a facility-risk-specific normalization factor for determining the risk analysis values and/or facility optimization values for a technical facility.

Claim 35 (Currently Amended): The method as claimed in claim 34, wherein the facility-risk-specific normalization factor is generated dynamically based on the basis of available facility data of technical facilities of the corresponding facility risk type.

Claim 36 (Currently Amended): The method as claimed in claim 32, wherein a scale of the first and/or second dimension of the ~~matrix~~ table ~~can be~~ is linearly selected.

Claim 37 (Currently Amended): The method as claimed in claim 32, wherein a scale of the first and/or second dimension of the ~~matrix~~ table ~~can be~~ is nonlinearly selected.

Claim 38 (Currently Amended): The method as claimed in claim 28, wherein the risk analysis values and/or facility optimization values for possible combinations and weightings of the protection elements and/or risk elements are generated automatically and stored so as ~~to be~~ accessible to a user [[by]] via an extrapolation module.

Claim 39 (Currently Amended): The method as claimed in claim 28, wherein the ~~evaluation module allocates~~ a group risk factor ~~is allocated~~ to each facility risk type ~~by the~~ ~~evaluation module, wherein the group risk factor comprises the~~ identifying an overall risk of all technical facilities of a facility risk type.

Claim 40 (Currently Amended): The method as claimed in claim 28, wherein the group risk factor is generated dynamically by the evaluation module.

Claim 41 (Currently Amended): The method as claimed in claim 28, wherein the capture module is configured accessible ~~decentralized~~ via a decentralized network.

Claim 42 (Currently Amended): The method as claimed in claim 28, wherein the ~~evaluation module forms~~ groups of protection elements ~~are formed~~ as knock-out protection elements with one or more protection elements ~~by the evaluation module, wherein~~ a knock-

out protection element ~~determines determining and/or dominates~~ behavior of [[the]] an entire group [[if]] when a given limit value of [[the]] a knock-out protection element is reached.

Claim 43 (Withdrawn): A computer-aided portfolio management system, comprising:

- a first database with predefined risk elements, wherein a risk instance and/or a risk potential of the technical facility can be detected in a quantified manner by a risk element;
- a second database with predefined protection elements, wherein a protection device and/or a protection possibility of technical facilities can be detected in a quantified manner by a protection element;

wherein at least one risk element and/or at least one protection element is stored allocated to the technical facility, wherein a facility-specific weighting factor can be determined for each risk element and protection element, which weighting factor comprises the relative weighting ratio of the risk element and/or protection element with respect to one another;

at least one measuring and/or capture device with corresponding interfaces for determining a facility-specific quality factor for each risk element and protection element, wherein the quality factor comprises an instantaneous facility-specific instance of a technical risk element or protection element on the basis of the measured facility data;

an evaluation module for determining risk analysis values on the basis of the sum of the products of the risk elements with associated weighting factors and quality factors combined with the sum of the products of the protection elements with associated weighting factors and quality factors,

wherein the portfolio management system enables or blocks a purchase and/or sale of securities and/or bonds on the basis of the risk analysis values.

Claim 44 (Withdrawn): The computer-aided system as claimed in claim 43, further comprising:

a memory module that comprises a multiplicity of facility risk types, wherein the facility risk types in each case comprise at least one risk element and/or one protection factor and each technical facility can be allocated to one facility risk type; and

a normalization module for automatically generating a facility-risk-type-specific reference value, wherein the facility data of different technical facilities are normalized by the normalization module on the basis of the reference value of the associated facility risk type; and

wherein purchase and/or sale of securities can be determined by the portfolio management system such that loss risks are minimized with highest possible profit possibilities.